

MISSOURI DEPARTMENT OF CONSERVATION



July/August 2021

Xplor

SUMMER'S HERE
AND OUTDOOR ADVENTURES AWAIT

CONTENTS

FEATURES

6 Pick an Outdoor Adventure

Hit the trail? Pitch a tent? Hook a fish? In this story, you get to decide what happens next.

DEPARTMENTS

- 2** Get Out!
- 3** What Is It?
- 4** Into the Wild
- 16** Predator vs. Prey
- 17** Strange but True
- 18** How To
- 20** Xplor More

I see you! A red fox pup catches us watching as it explores outside its den. Young foxes love to play with sticks, feathers, and bones. If the family moves to a new den, parents usually take along a few of their pups' favorite toys.

📷 by Noppadol Paothong



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ON THE COVER
Canoeing a Stream
by David Stonner

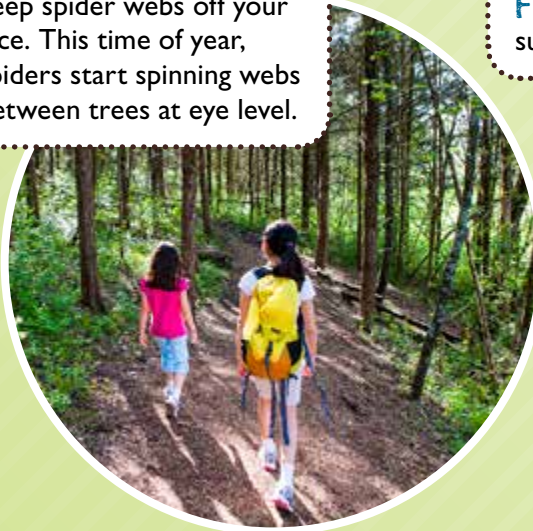
GET OUT!

FUN THINGS TO DO
AND GREAT PLACES
TO DISCOVER NATURE

Top your July Fourth burger with **GRILLED CHANTERELLES**. They appear in July and August. Never eat a mushroom unless you're sure it's safe.



GO FOR A HIKE, but carry a walking stick to keep spider webs off your face. This time of year, spiders start spinning webs between trees at eye level.



Young **STRIPED SKUNKS** BEGIN **FORAGING** with their moms. Make sure to bring in pet food at night.



© Betty420 | Dreamstime.com

BABY BATS START **FLYING** in early August. Watch for them at dusk.



Want to try fishing but don't have any gear? Make your own pole (see Page 18), or ask a grown-up to help you **FIND A ROD-AND-REEL LOANER LOCATION NEAR YOU** at short.mdc.mo.gov/ZJq.

What happened here? **ANT LION LARVAE** make small, cone-shaped pits in loose, dry soil.



WHAT IS IT?

DON'T KNOW?
Jump to Page 20 to find out.



- ❶ I live in the water,
- ❷ And I look like frog eggs.

- ❸ But I'm made up of squillions ...
- ❹ Of tiny "zoo buds."



Into the WILD under the prairie

Are you down for exploring the underground? Let's push aside the grass and see what we find living on the ground floor — and in the basement — of a prairie.

LOOK

Thirteen-lined ground squirrels dig a maze of burrows and escape holes. In October, the drowsy squirrels crawl into their tunnels, fall deeply asleep, and don't wake up until April!



Listen

Prairie mole crickets spend most of their lives underground, except during spring. That's when females fly around to look for mates. Males can't fly. Their wings are made to sing. They rub them together to make chirping sounds that drive lady crickets crazy. To make their love chirps louder, males dig trumpet-shaped tunnels.

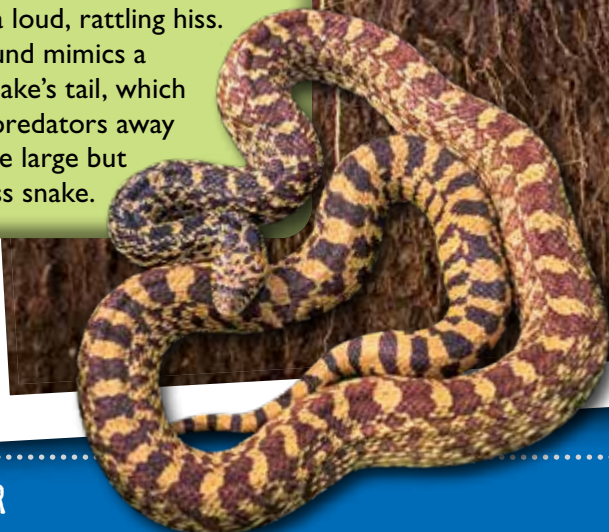
LOOK

Working at night, **American burying beetles** use their flat heads to bulldoze soil out from under dead animals like songbirds and mice. The beetles, which are one of Missouri's most endangered insects, feed the buried animals to their babies.



Listen

When threatened, a **bullsnake** makes a loud, rattling hiss. The sound mimics a rattlesnake's tail, which scares predators away from the large but harmless snake.





Many prairie plants grow deep roots. Big bluestem roots may reach 8 feet, and **compass plant** roots may reach 15 feet.



If you explore a prairie after sunset and hear someone snoring, it probably isn't a person. **Northern crawfish frogs** hide underground during the day. They come out at night to eat insects. Males call to mates with a loud, snore-like gwwaaa.



Ornate box turtles lay two to eight eggs in loose prairie soil. The temperature of the nest decides whether the baby turtles will be boys or girls. Males hatch from eggs kept at lower temperatures. Females hatch from eggs kept at higher temperatures.



American badgers use long, sharp claws to dig up their dinner of voles, mice, and ground squirrels. At full speed, the furry dirt-drills can disappear underground in less than a minute, which is faster than a person can dig with a shovel.

What Happened Here?

This is the entrance to a crayfish's house. Grassland crayfish tunnel — up to 15 feet deep — into soggy ground to stay cool and wet. As they dig, they carry blobs of mud to the surface and stack them to form tiny chimneys.





PICK AN OUTDOOR ADVENTURE

by Matt Seek

Hiking! Fishing!
Camping! Bigfoot?
Adventure awaits at one
of Missouri's more than
1,000 conservation areas.

START
HERE

1

Your eyelids snap open like spring-loaded window shades. Something — you aren't sure what — has jolted you from a deep and pleasant slumber.

The clock on your dresser reads 5 a.m. Your foggy brain manages to remember it's Saturday, the first day of summer break, and you had big plans ... to sleep in.

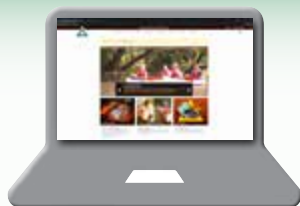
Just as you're rolling over to return to dreamland, you hear something: a rumble from the garage, as if an avalanche of boxes had suddenly crashed onto the concrete floor.

What do you do?

- ▶ Stick to Plan Zzz and go back to sleep. It's probably just the cat. **Go to 2.**
- ▶ Could a robber be ransacking your garage? You'd better investigate. **Go to 3.**

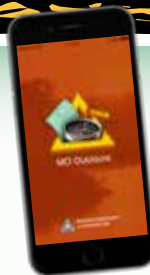


ROAD TRIP TOOLKIT



mdc.mo.gov

Your one-stop-shop for planning an outdoor adventure. Search for "things to do."



MO Outdoors

Use this free app to get turn-by-turn directions to conservation areas, shooting ranges, and nature centers. Tailor your search to specific activities, including birdwatching, camping, fishing, hiking, hunting, or shooting.



2

You snuggle deeper under the covers. Just as you're drifting off, you feel the cat drop lightly onto your bed and curl up for a nap.

You dream about roasting marshmallows over a crackling campfire. Bigfoot, three little green space aliens, and your brother sit around the glowing coals, each holding a stick with marshmallows exhibiting various degrees of charred-ness. Bigfoot has at least a dozen marshmallows threaded onto his stick. You think this is slightly greedy, but you feel it's unwise to point out.

Bigfoot grunts that he's going to get some graham crackers and chocolate. When he stands up, he bonks his hairy head on a low-growing branch. As the limb cracks neatly in two, it makes a hollow *knock! Knock! KNOCK!* And Bigfoot, seemingly unfazed, says something strange:

"Wake up sleepy-head. We're burning daylight."

You open your eyes to find Dad standing in the bedroom. "Get dressed," he says, "and meet me in the garage."

► **Go to 4.**



3

You tiptoe down the hallway.

The closer you get to the garage, the worse this idea seems. The baseball bat you brought along as a robber-be-good stick feels harmless and silly. You hear boxes scrape across the garage floor and clinks and clunks as someone — definitely not the cat — sorts through their contents.

The door to the garage is ajar. Barely breathing, you peek through the crack. You've got a bad feeling about this ...

► **Go to 4.**

4

"You're finally up," Dad says.

He's sitting in the eye of a gear hurricane. The garage floor swirls with clouds of fishing rods, canoe paddles, backpacks, and hiking boots. As you stare, wondering A) how many gallons of coffee Dad has consumed, and B) what possessed him to clean out the garage at such an awful hour, he gathers up a cast-iron frying pan, a can of bug spray, and a roll of toilet paper and chucks them — seemingly without thought — into the gaping hatchback of the family car.

"We're going on a road trip!" Dad proclaims.

An unsettling gleam in his eye worries you, but you know it's too late to walk him back from his plan. Your brother is already buckled into the back seat of the car, happily gnawing on a granola bar.

"Where?" you manage to ask.

"That's the best part," Dad says. "I don't know. It'll be an *adventure*."

He hands you his phone and taps an app called "MO Outdoors." The screen shows several buttons and asks a simple question: What would you like to do?

Which button do you push?

► *Camping.* **Go to 5.**

► *Hiking.* **Go to 6.**

► *Fishing.* **Go to 7.**



MO Fishing

This free app offers fishing reports, regulations, information on fish species, and maps of public boat ramps, underwater fish structures, and more.

iNaturalist

Use this free app to identify wildflowers, insects, birds — whatever you point your smartphone at.

Nature Boost

Need something to listen to on your drive to the wild? Download episodes of *Nature Boost* wherever you get your podcasts.





8

It looks like you have the conservation area all to yourselves. You find a campsite near a gurgling stream. After pitching the tent, you spread out to explore the surrounding woods.

Birds call from the treetops. A gray squirrel scolds you from a branch. Your brother finds a spotted salamander hiding under a rotting log.

"C'mere," Dad yells from the stream. "Look what I found."

He holds up a dirt-smeared bottle, pulls out the cork, tips the bottle upside-down, and a rolled-up piece of paper falls out. You unroll the paper. It looks like a map. And just like in the movies, a black X marks the spot where treasure must be!

"Look here," Dad jabs a finger at the map. "This is that horseshoe bend just upstream. And here's the clearing where we're camped. The X is only a half mile north."

A smile is starting to widen across Dad's face. You know what *he's* thinking, but what do *you* want to do?

- ▶ Ahoy, matey! Let's find some buried booty. **Go to 16.**
- ▶ Whoever hid the treasure doesn't want to share. Let's pretend we never found the map. **Go to 18.**



5

You tap the camping button, and the screen displays a long list of conservation areas. You had no idea there were so many places in Missouri where you could pitch a tent!

By now, you're strapped in to the passenger seat, and Dad is pulling the car out of the garage. "Where are we going?" he asks.

"I think I've found the perfect place," you say after scrolling through several options.

- ▶ **Go to 8.**

6

You tap the hiking button, and the screen displays a long list of conservation areas. You had no idea there were so many places in Missouri where you could hit the trail!

By now, you're strapped in to the passenger seat, and Dad is pulling the car out of the garage. "Where are we going?" he asks.

- ▶ For an easy walk in the woods. **Go to 13.**
- ▶ To the rooftop of Missouri. **Go to 9.**
- ▶ Back in time. **Go to 15.**

9

At Ketcherside Mountain Conservation Area, you shoulder your heavy backpack and step onto the Ozark Trail, a nearly 400-mile-long path that crosses some of the most rugged and beautiful wilderness in the state. Soon, you're zigzagging steeply uphill, huffing and puffing with every step. *What did you get yourself into?*

A thunderstorm blew through overnight, leaving the trail damp. At one point, you look down and glimpse a huge footprint smudged in the mud. Someone — someone barefoot and with huge feet — had walked this way earlier.

"Look what I found!" Dad's voice makes you jump. You were remembering a strange dream you'd had about Bigfoot.

"Blackberries!" Dad says. "They're everywhere."

Your brother is already stuffing his face with berries. You pop one in your mouth. It's juicy and sweet. Hoping to find more, you walk around a bend in the trail ... and come face-to-furry-face with a black bear. What do you do?

- ▶ Run! You don't have to outrun the bear. You just have to outrun your brother. **Go to 11.**
- ▶ Back away slowly. **Go to 12.**



7

You tap the fishing button, and the screen displays a long list of conservation areas and river accesses.

You had no idea there were so many places in Missouri where you could wet a line!

By now, you're strapped in to the passenger seat, and Dad is pulling the car out of the garage. "Where are we going?" he asks.

- ▶ Fly-fishing on a cool Ozark stream. **Go to 10.**
- ▶ "Big game" fishing. **Go to 21.**



10

Your canoe drifts silently in the swift current of the Eleven Point River. Tendrils of mist curl out of the cold, clear water. A wood duck, startled by your sudden appearance, squawks as it bursts into flight.

Dad steers the canoe toward shore and beaches it on a gravel bar. This section of the river, from Greer Spring Branch to Turner Mill, is a Blue Ribbon Trout Area. Catching a finicky rainbow from these waters will be tricky.

Dad reaches into his fishing vest, pulls out a fly box, and opens it with a flourish, as if it were a menu at a fancy restaurant.

"What's for dinner?" he asks. Which lure do you choose?

- An Adams dry fly. **Go to 19.**
- A woolly bugger. **Go to 25.**



11

Before you can turn and run, the bear gives a huffy snort and bolts off into the brush. You hear vegetation crash as it keeps running.

At least now you know what made those huge footprints!

When your heart returns to normal speed, you tell Dad what happened. He says that if you ever meet another bear, it's much safer to back away slowly.

- **Go to 27.**

American black bear



12

You raise your arms above your head to look as big as possible and back up slowly. In what you hope is a firm voice, you squeak out: "Get lost bear!"

The bear takes your advice and bolts off into the brush. You hear vegetation crash as it keeps running. At least now you know what made those huge footprints!

When your heart returns to normal speed, you tell Dad what happened.

- **Go to 27.**



Gray treefrog



13

Despite your early start, the lot at Burr Oak Woods Conservation Area is nearly full when Dad parks the car at the Bethany Falls trailhead.

This must be a popular place.

The trail winds off into a shady forest, offering an escape from the sweltering sun. Bird calls ricochet around the treetops. You spot a turkey and her gangly poults scratching through leaf litter. Your brother finds a treefrog sleeping on the knobby bark of an oak.

Eventually, the path disappears into a maze of rocks. You walk in and find yourself surrounded by head-high walls of limestone.

With a grunt, Dad plops down for a sip of water. Your brother — who must be half-squirrel — immediately begins scrambling up the face of a nearby wall. Do you join him?

- Rock on! You're a regular Alex Honnold. **Go to 14.**
- You'll leave the climbing to squirrels and little brothers. **Go to 20.**

14

You plant your toes in a couple of dimples on the wall and reach up to grab an exposed tree root growing above your head.

Hiiiiissss! That's odd. Did the root just ...

You realize, as your fingers curl around its scaly skin, that the root is not a root. It's a black snake! And it seems offended that you just used it for a climbing hold.

You tumble off the rock and land with an *oomph!* on your backside. The snake slithers into a rocky crevice. What do you do?

- ▶ Run screaming back to the car. **Go to 17.**
- ▶ What's the big deal? It's just a snake. Let's keep hiking. **Go to 23.**



16

"It's got to be around here somewhere," you say.

You found the beehive, indicated on the map by a crudely drawn tree with bees buzzing around it. From there you stepped 50 paces north and found the next marker: a boulder shaped like a fish. Now, after carefully walking 30 paces due west — just like the map said — you can't find anything.

You're standing in a cathedral of towering oaks. Moss carpets the shady ground. And everywhere you look are yellow, trumpet-shaped mushrooms. It's a stunning spot. But nowhere do you see any hint of buried treasure.

"I think we found it," Dad says.

What?! "Where?"

He points to a mushroom at your feet. "Those are chanterelles, one of the tastiest mushrooms in the world. Somebody didn't want to forget how to find this spot."

You reach down and pick it up. It smells earthy and a bit like apricots. Your brother has made his shirt into a basket and is already hard at work filling it with fungi.

"I know what to do with these," Dad says. "But pick just a few. Let's leave most for next year — and for whoever drew the map."

- ▶ **Go to 18.**



15

You have to look *waaayyy* into the distance to find a tree at Wah'Kon-Tah Prairie Conservation Area. You spray your clothes with bug repellent, slather on sunscreen, snug down your baseball cap, and step into an ocean of wildflowers. A refreshing breeze sends waves rippling across the tall grasses.

Prairies once covered 15 million acres of Missouri — about a third of the state. Today, fewer than 51,000 acres remain. Exploring one of these unplowed grasslands is like going back in time to before the Show-Me State was settled.

An app called iNaturalist helps you identify what you see: Big bluestem grass grows high over your head. The delicate petals of a pale purple coneflower remind you of a ballerina's tutu. Compass plant's spiky leaves almost always point north and south — how cool is that! Your brother runs hither and yon, swinging a butterfly net. He returns periodically to show off what he's caught: a pipevine swallowtail ... a monarch ... a great spangled fritillary.

Your nose is buried in iNaturalist when you hear a loud, hoarse *hiiiiissss!* Under a clump of Indian grass is a huge snake, coiled as if to strike. What do you do?

- ▶ Run screaming back to the car. **Go to 29.**
- ▶ What's the big deal? It's just a snake. **Go to 33.**



Pipevine swallowtail

Compass plant



Prairie blazing star

Pale purple coneflower

17

You're nearly back to the car before Dad catches up.

"It's just a snake," he says. "It was more scared of you than you were of it."

You're not sure you believe him.

"It'd be a shame to end our road trip so early," Dad says. "Should we check out the nature center since we're here?"

- ▶ Why not? **Go to 31.**
- ▶ You've had enough nature for now. **Go to 38.**

18

The campfire crackles and embers dance in the night sky.

Earlier, Dad cooked chicken with chanterelle mushrooms in foil packets over the glowing coals. You never knew something so simple could taste so good!

Now you're roasting marshmallows for s'mores. Dad is holding a flashlight under his chin and telling a spooky story about a mushroom hunter who got taken by space aliens *in these very woods*. Your brother, his face growing paler with every sentence, keeps scooting closer to you. He hasn't noticed his marshmallow is on fire.

An owl hoots from somewhere in the woods, sending your brother over the edge. He drops his burning marshmallow, scrambles to the tent, and zips himself inside. After a s'more (or maybe it was three), you join him. Dad says he's going to sleep "under the stars."

► **Go to 22.**



20

Maybe choosing to sit beneath your brother while he was climbing wasn't your best idea.

But it worked out well for *him*. You hear a squeal of surprise, and the next thing you know, your brother is sprawled out on top of you. *Oomph!*

"A spider crawled over my hand," he says. "I think I'm done climbing for today."

► **Go to 23.**



Speckled wolf spider

21

You've been fishing at Bull Shoals Lake for hours without a bite. Well, that's not exactly true. You've caught a few largemouth bass, but they aren't why you're here. You're here for something ... *larger*.

Striped bass aren't native to Missouri. Their home waters are along the Atlantic coast. Like salmon, they're born in freshwater, spend their adult lives in the ocean, and return to rivers to spawn. An accidental stocking released these saltwater fish into Bull Shoals in 1998, and they have flourished here, even without a trip to the sea. Stripers can grow to ginormous sizes — the Missouri record is 65 pounds — which is one reason anglers love to catch them.

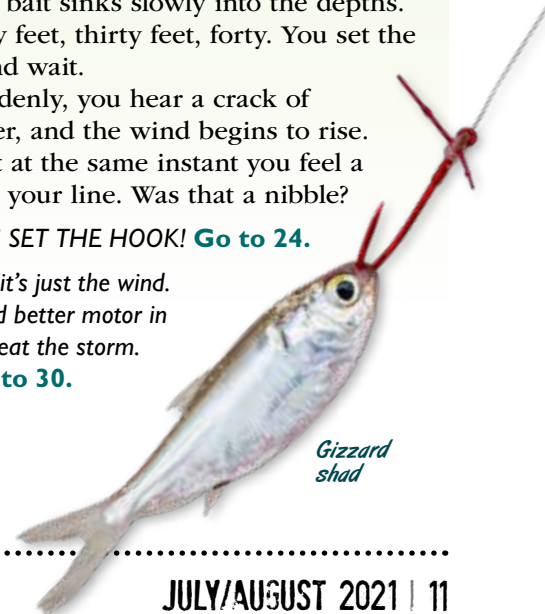
But you aren't having any luck. You slip another shad onto a hook and drop it into the water. Maybe this is the spot ...

The bait sinks slowly into the depths. Twenty feet, thirty feet, forty. You set the reel and wait.

Suddenly, you hear a crack of thunder, and the wind begins to rise. Almost at the same instant you feel a tug on your line. Was that a nibble?

► **YES! SET THE HOOK! Go to 24.**

► *No, it's just the wind. We'd better motor in to beat the storm.*
Go to 30.



Gizzard shad

19

You tie an Adams to the

end of your line and cast it out into the calm water behind a large boulder. The fly lingers there for a moment until the current starts to tug it toward swifter water. Just

when you're about to cast to a new spot, you hear a soft sip and see the fly disappear into the depths.

Your rod bends into a horseshoe as the trout dives. You lift up to put pressure on the fish, and suddenly it reverses course and starts jumping at the surface, trying to throw the hook from its mouth. Your brother, noticing the commotion, wades over with a landing net. The fish goes deep again, and you let it go. When the trout stops running, you reel it in slowly, and your brother cradles it in the net.

After Dad snaps a photo, you slip the hook from the trout's mouth and let the silvery fish swim out of your hand.

► **Go to 36.**



Rainbow trout

22

Your brother elbows you awake. "What?!" you hiss.

"Dad's gone," he says. "I got up to use the bathroom, and his sleeping bag's empty."

You're sure your brother is mistaken. Dad would never leave you alone in a strange campground in the middle of the night.

But sure enough, he's gone.

You call out several times, but the only thing that calls back is a croaking bullfrog. Suddenly, the darkness is sliced by a piercing beam of light. The beam shines upward from a nearby pond like an elevator to the heavens. Then, just as suddenly as it appeared, it flickers off, and darkness returns.

"Dad's been abducted by aliens," your brother wails.

You're sure this isn't the case. There's no such thing as aliens, right? Nevertheless you ...

- Sneak to the pond to check out the light. **Go to 26.**
- Zip yourself in the tent and stay awake until Dad returns. **Go to 35.**

23

After a short water break, you continue hiking.

The trail passes through a prairie dappled with wildflowers. You watch a doe and her twin fawns graze in a grassy savanna. By the time you circle back to the parking lot, your walk in the woods has left you content and relaxed.

"Should we check out the nature center since we're here?" Dad asks.

- Of course! **Go to 31.**
- You've had enough nature for now. **Go to 38.**

24

You've definitely hooked a striper — or a dump truck — you aren't sure which.

Your rod bends into a horseshoe, and line screams off the reel. The fish dives, then rises. Speeds away, then returns. Your brother stands beside you, net at the ready.

You fight the fish for a solid 10 minutes. Angry clouds have now appeared on the horizon. Dad says you've got to land the fish *now*.

Luckily, the fish is starting to tire. Yard by yard you reel, and soon a huge, torpedo-shaped striper is splashing beside the boat.

Dad helps your brother net the fish. It's a huge, silver-sided beauty, at least 20 pounds. You quickly take a selfie with your catch, remove the hook, and return the striper to the lake.

► **Go to 37.**

25

You tie on a woolly bugger, cast it into the tail of a rocky riffle, and watch the current drag the lure into a deep pool. You let the bugger sink for a count of five then begin pulling it back with a jerky start-stop motion. Just when you're about to cast to a new spot, you feel a sharp tug.

Your rod bends into a horseshoe. Suddenly, a smallmouth bass is splashing at the surface, trying to throw the hook from its mouth. Your brother, noticing the commotion, wades over with a landing net. The bass swims to deeper water, and you let it go. When it runs out of steam, you reel it in slowly, and your brother cradles it with the net.

After Dad snaps a photo, you slip the hook out of the smallmouth and let the bronze-colored fish swim out of your hand.

► **Go to 36.**



Smallmouth bass

26

You creep to the pond with your brother as your shadow. As you approach the shoreline, you hear muffled voices and see the same bright light flicker on and off. You get the feeling that someone — or *something* — is watching you from the shadows. You spin around just in time to see a figure, covered in mud, splash out of the moonlit water and walk straight toward you.

“Glad you could join us,” Dad says, wiping mud off his chin. “Hold this flashlight while I run to the car for fresh batteries.”

When he returns, Dad explains how he got invited to join a couple locals on a frog hunt. As blobs of mud drip off his body, he insists we join him.

- Why not? [Go to 32.](#)
- Why would you want to? [Go to 35.](#)

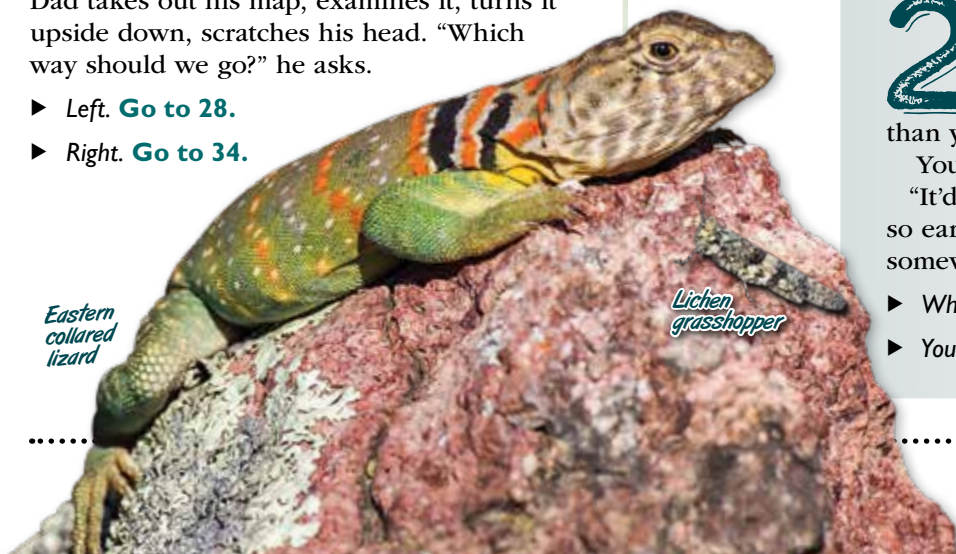


27

You continue hiking, keeping an eye out for bears. The white OT trail markers lead you under towering shortleaf pines and forests of oaks and hickories. At one point, you stop to explore a sun-filled glade. Your brother’s sharp eyes spot a lichen grasshopper, nearly invisible against the rocks, and you catch a glimpse of a colorful collared lizard dashing into a crevice among the stones.

Eventually, you reach a fork in the trail. Dad takes out his map, examines it, turns it upside down, scratches his head. “Which way should we go?” he asks.

- Left. [Go to 28.](#)
- Right. [Go to 34.](#)



Eastern collared lizard

Lichen grasshopper



Mina Sauk Falls

28

The left fork of the trail runs mostly downhill. *Thank goodness!*

After about a mile of walking, you hear a strange roar. It’s not a bear — you’re sure of that — but the farther you walk down the trail, the louder the roar becomes. You’re well ahead of Dad and your brother. You wonder if they hear it.

You walk slower now, not sure you want to discover what’s making the noise. When you do, you’re both shocked and delighted.

Water rushes through a series of chasms, cascading over the hillside, to crash against rocks several stories below. You notice a nearby sign. It says this is Mina Sauk Falls, and at 132 feet tall, it is the highest waterfall in Missouri.

When Dad and your brother catch up, the three of you scramble carefully down the rocky hillside to the base of the waterfall for selfies.

- [Go to 34.](#)

29

You’re nearly back to the car before Dad catches up.

“It’s just a snake,” he says. “It was more scared of you than you were of it.”

You’re not sure you believe him.

“It’d be a shame to end our road trip so early,” Dad says. “How ’bout we find somewhere to camp?”

- Why not? [Go to 8.](#)
- You’ve had enough nature for now. [Go to 38.](#)

30

Dad turns the key, but the boat's engine only sputters. Angry clouds appear on the horizon. And to make things more complicated, you've hooked a striper — or a dump truck — you aren't sure which.

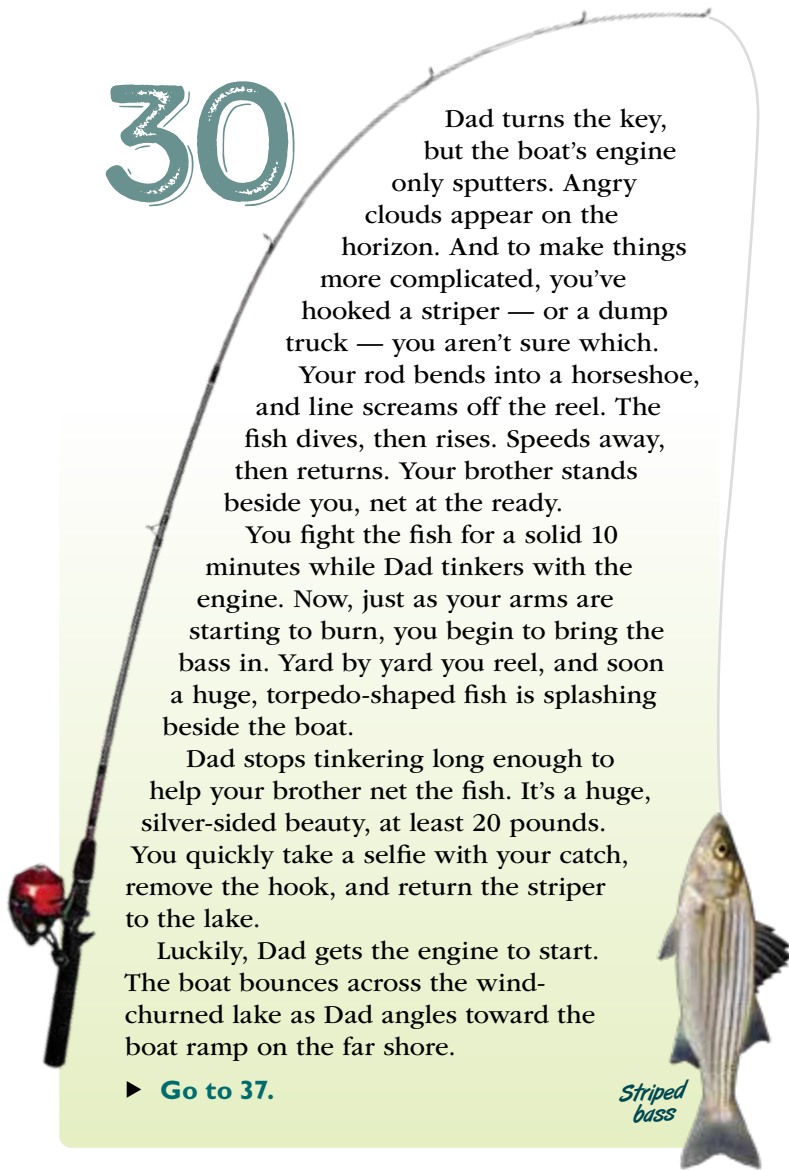
Your rod bends into a horseshoe, and line screams off the reel. The fish dives, then rises. Speeds away, then returns. Your brother stands beside you, net at the ready.

You fight the fish for a solid 10 minutes while Dad tinkers with the engine. Now, just as your arms are starting to burn, you begin to bring the bass in. Yard by yard you reel, and soon a huge, torpedo-shaped fish is splashing beside the boat.

Dad stops tinkering long enough to help your brother net the fish. It's a huge, silver-sided beauty, at least 20 pounds. You quickly take a selfie with your catch, remove the hook, and return the striper to the lake.

Luckily, Dad gets the engine to start. The boat bounces across the wind-churned lake as Dad angles toward the boat ramp on the far shore.

► **Go to 37.**



Striped bass

32

You quickly learn that bullfrogs are as jittery as your brother after his third can of cola. And sneaking close enough to nab one with your bare hands takes skill — and a little luck. But it's tons of fun.

You slowly circle the muddy pond bank, sweeping your flashlight all around. When you spot a bullfrog, you keep the light right in its face. This seems to hypnotize the hopper, which allows you to creep toward it, reach out s-l-o-w-l-y and ... *CROAK!*, the frog leaps deftly out of reach.

You finally manage to catch your limit of eight frogs. And you've never had so much fun and gotten so dirty doing it. You'll need to wash your sleeping bag — maybe twice — when you get home. But you don't care.

► **Go to 35.**



31

In the nature center, you explore a gurgling stream, watch huge bass swim lazily in a 3,000-gallon aquarium, and get a closeup look at a toddler-sized woodpecker.

At Dad's urging, you attend a program where a guy who identifies himself as a "fly tier" — whatever that is — teaches you how to make a fishing lure out of yarn, some feathers, and a hook. The lure is called a woolly bugger, which you think sounds funny, but the tie guy assures you that fish will find it irresistible.

As you're leaving Burr Oak Woods, Dad says: "I know where we could try out these woolly buggers. Wanna go?"

► *Why not?* **Go to 10.**

► *You're beat. Maybe another time?* **Go to 38.**



33

The iNaturalist app says you've found a bullsnake. Apparently these harmless reptiles can grow to be more than 6 feet long! You give the cranky snake plenty of room and walk around it.

You explore the prairie a bit longer, but eventually the scorching sun forces you back to the car.

"It'd be a shame to end our road trip so early," Dad says. "How 'bout we find something else to do?"

"I know just the thing," you say. "Let's go ..."

► *"Camping."* **Go to 8.**

► *"Fishing."* **Go to 21.**

► *"Home."* **Go to 38.**



Bullsnake

34

Ugh! Unfortunately for your aching calves, the trail rises uphill. You plod on, past rocky overlooks with spectacular views of the surrounding mountains and valleys.

Thankfully, you don't walk far before you reach the top of the hill. A plaque beside a large boulder proclaims you've summited Taum Sauk Mountain. At 1,772 feet, this is the highest point in Missouri. You climb atop the boulder, and — at least until Dad joins you — you are the tallest person in the Show-Me State.

After some selfies to record your summit, it's a short, fantastically flat, walk to the trailhead. You've spent nearly the whole day hiking, and though your legs are tired, you feel peaceful and content. Dad says, "Should we head home or find somewhere to camp?"

- *You've had enough nature for today. Let's head home.* **Go to 38.**
- *How could you pass up a crackling campfire and s'mores?* **Go to 8.**

35

Soon, your eyelids grow heavy, and you drift off to sleep.

The smell of smoke wrestles you awake. You unzip the tent to find Dad frying chicken wings in a cast-iron skillet. You've never had chicken for breakfast, but after last night's adventure, you're ready for anything.

Dad waits until you've gobbled down a couple wings before commenting. "I didn't know you'd like frog legs," he says. "They're good, aren't they?"

Even after you learn what they are, they're so tasty you paper-rock-scissors with your brother for the final frog. He, unfortunately, wins.

- *You help Dad strike camp and load everything into the car.* **Go to 38.**



36

The rest of the day is a blur of catching trout and smallmouth, running the canoe over rapids and riffles, and cooling off with dips in the river's cool, spring-fed pools. All in all, a perfect day.

At the takeout ramp, Dad asks, "Should we head home or find somewhere to camp?"

- *It's been a blast, but you've had enough nature today.* **Go to 38.**
- *How could you pass up a crackling campfire and s'mores?* **Go to 8.**

37

Just as you reach the boat ramp, there's a crack of thunder, and the heavens open up. You help Dad trailer the boat, then jump in the car and towel off. *Whew!* You barely made it.

As you're driving away, Dad asks, "Should we head home or find somewhere to camp?"

- *In the rain? No thanks.* **Go to 38.**
- *This storm's going to blow over. How could you pass up a crackling campfire and s'mores?* **Go to 8.**

38

On the drive home, you think about all the amazing things you've seen and done this weekend.

"Let's do this again," you say.

"Sure," Dad says. "But not next weekend. I'm planning to sleep in."

— The End —

THIS
ISSUE:

ROBBER FLY

VS

HUMMINGBIRD!

illustrated by
David Besenger

Lethal Legs

A robber fly's victim has little hope for escape once the fly wraps its strong, spiny legs around it.

Venom Dagger

Whack! A robber fly stabs its knifelike mouth into unsuspecting prey and injects venom that paralyzes and starts to digest the victim.

Buzz Off!

During high-speed maneuvers — such as escaping from a predator — a hummingbird can flap its wings up to 200 times a second.

Stabby Yapper

Hummingbirds wield their beaks like spears to keep other hummers away from flowers and to defend themselves from predators.

AND THE WINNER IS...

Some robber flies can grow up to 1.5 inches long. Their size helps them overpower bees and wasps. Although they sometimes take prey as large as a hummingbird, it happens rarely, and this hummer zips off to safety.

STRANGE but TRUE!

YOUR GUIDE TO ALL THE
UNUSUAL, UNIQUE,
AND **UNBELIEVABLE**
STUFF THAT GOES ON IN NATURE



At birth, baby **BATS** can weigh almost a third of their mom's weight. In an emergency, some mama bats fly their chunky babies to safety. To stay attached during flight, the pup clings to mom's belly with its hind feet — and also its teeth. *Ouch!*

Tinkle toes: **TURKEY VULTURES**, like all birds, don't sweat. So when temperatures get toasty, vultures pee down their legs. As the urine evaporates, it carries heat off the bird's body, which helps the vulture keep cool and carrion.



SKIPPERS are a group of small butterflies named for their flitty, zippy, skipping flight. Though they rarely fly in a straight line, they zigzag faster than any other Missouri butterfly, clocking speeds of up to 37 mph.



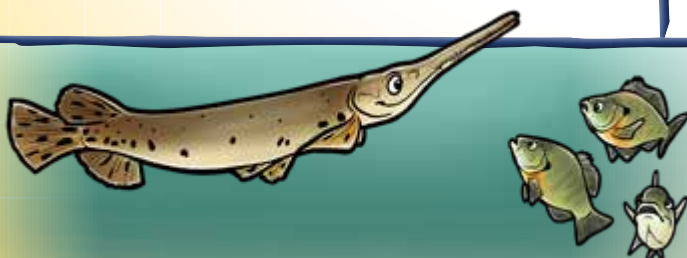
Not a turtle to be trifled with: **ALLIGATOR SNAPPING TURTLES** are easily Missouri's largest reptile. The biggest snapper on record weighed a whopping 251 pounds. Missouri's largest specimen tipped the scales at 128 pounds.



MOMARCH CATERPILLARS are normally peaceful creatures. But when milkweed — the only thing they eat — gets scarce, competition for food can bring out bad behavior. To knock rivals off a leaf, the colorful caterpillars headbutt each other.



Bombs away! A **BOMBARDIER BEETLE** has a cannon in its caboose. When threatened, it mixes up a cocktail of chemicals inside its abdomen. This causes an explosive reaction that sprays out of the beetle's backside and burns any would-be attacker.



Snap out of it! **GAR** often swim to the surface to open and close their toothy mouths with loud **SNAPS**! This brings air into a gar's swim bladder, which works like a lung and helps the gar survive in water that contains little oxygen.

How To

Make a Fishing Pole

No Pole?
No Problem.
You don't need
fancy tackle to
catch loads of fish.

HERE'S WHAT YOU NEED

- A sturdy branch, preferably green and slightly bendy, 5 to 8 feet long
- Monofilament fishing line
- Fishing hook (No. 6 is a good size for bluegill, bass, and catfish)
- Bobber
- Bait





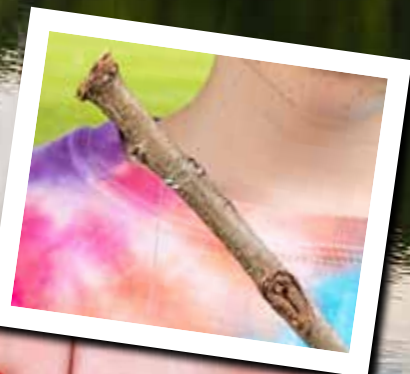
Let's Go Fishing!

Cast your line into the water and watch the bobber. If you see it start to jiggle, a fish is nibbling on the bait. When you see the bobber sink suddenly, lift the tip of the rod firmly — but don't jerk too hard — to set the hook.

HERE'S WHAT YOU DO

- 1 Tie about 10 feet of fishing line to the end of the branch.

Pro tip: Instead of tying the line at the end of the branch, tie it to the part that you will use for a handle. Wrap the line around the branch until you get to the tip, then tie another knot and leave about 10 feet of line hanging off the end. This way, if a big fish snaps the branch, you can still pull in line using your hands.



- 2 Tie a hook on the end of the fishing line.

Pro tip: We often recommend using a pair of pliers to flatten the barb on a hook. This makes it easy to remove the hook if you're going to release a fish. But if you're using live bait, leave the barb on! It keeps the bait from wiggling off the hook.

- 3 Attach a bobber to the line about 3 feet up from the hook.

Pro tip: Sometimes the key to catching fish is figuring out how deep they are hanging out. You may need to move your bobber up or down the line to place your bait in front of a fish.

- 4 Put some bait on your hook. Earthworms, grasshoppers, and minnows work well for a variety of fish.

Pro tip: Earthworms are usually easy to find. Look under layers of leaves in the woods. Or dig down into shady, damp soil. To keep worms wiggly — fish like them fresh — store them in a cool, dark container with a little moist soil.

XPLOR·MOR

Nest-door Neighbors

Cliff swallows like to nest with lots of neighbors nearby. In fact, it's not unusual for several hundred — or even several thousand — nests to be crowded together on a single bluff or bridge! To feed hungry

chicks, moms and pops chase down flying insects. Each chick has a pattern on its face that is slightly different from other chicks. Biologists think this is one way parents know which chicks are theirs.



Instructions: These mama swallows are tired from chasing bugs all day. Can you help each one find its chick among all of the neighboring nests? Write the number of each mom's chick in the blank.

WHAT IS IT?

— FROM PAGE 3 —

send their tentacles out from the blob's edge to pull in micro-nutrients. They like warm, clean water, so you might see them in a pond or lake this summer. But don't worry — they can't hurt you. Learn more at mdc.mo.gov/field-guide.

Freshwater bryozoans (*bry-uh-zoh-uhnz*) are often mistaken for masses of frog eggs. But these spotted blobs of goo are actually colonies of microscopic critters called "zooids." These little boogers reproduce by budding. To eat, they



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FREE TO MISSOURI HOUSEHOLDS

CRITTER CORNER

Cicada Killer



This big wasp might be the scariest-looking stinger in Missouri. But only the female stings, and she only attacks dog-day cicadas — unless you try to handle her. In fact, it's fascinating to watch females drag clunky cicadas into their nests to feed their growing larvae. If you live near an open, sandy area, look for a mound of loose dirt with a shallow furrow, which marks a nest entrance. Be careful, and learn more at mdc.mo.gov/field-guide.